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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/187,472 11/06/98 ALLINGTON

R 17990-1-1

EXAMINER
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IM62/0424

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ART UNIT	PAPER NUMBER

1761

DATE MAILED:

04/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/187,472

Applicant(s)

ALLINGTON ET AL.

Examiner

Drew E Becker

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 56-58, 62-69 and 71-81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 56-58, 62-69 and 71-81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The declaration under 37 CFR 1.132 filed February 12, 2001 is insufficient to overcome the rejection of claims 1-9, 11, 56-58, 62-69, and 71-81 based upon the 112(2) and 103(a) rejections as set forth below because: although the declaration discusses differences between the gases exhumed during roasting of potatoes versus coffee beans and the alleged inability of Hansen's filters to remove these different products; the current claims do not recite any specific filter structure or type which would define over the filtering means of the relied upon references, and therefore general filtering means read upon the current claims. Furthermore, the method of Hansen is not "frying" since there is no cooking oil, but rather a roasting process with heated air.
2. In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-9, 56-58, and 78-79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. Claims 1 and 78 recite the limitation "a relatively major portion" and "a relatively minor portion". It is not clear what is considered "relatively major" and "relatively minor", for instance a majority and minority?
6. Claim 9, line 3 recites "removing substantially all pollutants from the air". It is not clear whether this is the same step recited in claim 1.
7. Claim 56, line 8 recites "cooling at least a portion of the used air and recirculating any remaining portion of the cooled air to the hot air supply; discharging the at least a portion of used air in its entirety into the closed room". It is unclear what is meant by "its entirety" or what "it" is. It is not clear what the "remaining portion" is, or how it is created, since this appears to be the only portion being cooled. It is not clear whether the discharged air has been cooled or filtered.
8. Claim 79, line 8 recites "an unobstructed air gap". It is not clear what is considered "unobstructed".

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 71-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi [Pat. No. 4,849,625].

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Camerini Porzi teaches a method of roasting coffee beans comprising a photoemitter element (Figure 1, 1), a photodetector for monitoring the color of the beans during roasting (Figure 1, 2), a colorimeter which produces an output signal equivalent to desired color (Figure 1, 7; column 4, line 17), and a comparator which ends the roasting when the signals from the colorimeter and photodetector are equal (column 4, lines 22-26). Although not specifically recited, it would have been obvious to one of ordinary skill in the art that the desired color or darkness level of Camerini Porzi would inherently possess a desired aroma since both are properties of fully roasted coffee beans. It would have been obvious to one of ordinary skill in the art to adjust the roasting of Camerini Porzi as a function of temperature since Camerini Porzi further teaches monitoring the amount of heat applied during roasting (column 2, line 45) and since different types and sizes of beans require varying levels and rates of heat transfer which would have been provided by adjusting the temperature of Camerini Porzi, as further evidenced by Gell Jr (column 4, line 61 to column 5, line 19).

11. Claims 1-3 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi as cited above, in view of Tidland et al [Pat. No. 5,958,494].

Camerini Porzi teaches the above mentioned concepts. Camerini Porzi does not teach removing substantially all pollutants from the roasting air followed by exhausting a portion of the filtered air into the surrounding room, and reheating and recycling the remainder back into the roaster. Tidland et al teach a method of roasting comprising removing pollutants from the exhaust (column 2, line 29), recycling the filtered air (column 2, line 28), pressure sensors which monitor the air flow and detect blockages

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(column 3, line 59), and discharging a portion of the filtered air to the surrounding room during roasting (column 5, lines 42-54). It would have been obvious to one of ordinary skill in the art to incorporate the method of exhaust of Tidland et al into the invention of Camerini Porzi since both are directed to the roasting of coffee beans, since Tidland et al teach that this makes the roasting system more energy efficient (column 2, line 44) and eliminates the need for external venting (column 2, line 21), and since the roasting method of Camerini Porzi would naturally require some means of exhaust.

12. Claims 11 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi as applied above, in view of Hansen [Pat. No. 5,690,018].

Camerini Porzi teach the above mentioned concepts. Camerini Porzi do not teach cleaning and cooling the roasting air followed by discharging the clean, cool air to a room. Hansen teaches a method of roasting foods by cooling the roasting air (column 5, lines 35-38), cleaning the roasting air (column 4, lines 29-42), followed by exhausting the cool, clean air to a room (column 4, lines 43-57). It would have been obvious to one of ordinary skill in the art to incorporate the cooling and cleaning of Hansen into the invention of Camerini Porzi since both are directed to methods of roasting foods, since Hansen teaches that this prevents emission of heat, smoke, and odors to the surrounding air which is an inconvenience to the customers and work staff (column 1, lines 49-62), and since the roasting method of Camerini Porzi would naturally require some means of exhaust. Although not specifically recited, it would have been obvious to one of ordinary skill in the art to vary the amount of coffee beans roasted by the method of Camerini Porzi since a large amount of roasted coffee beans would permit a greater

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amount of coffee to be brewed or sold and since this would have been done during the course of normal experimentation and optimization.

13. Claims 73-74 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi as applied above, in view of Grubbs et al [Pat. No. 4,110,485].

Camerini Porzi teach the above mentioned concepts as well as an air gap between the window and the photoemitters (Figure 1, #1 & 4). Camerini Porzi do not teach the use of a laser beam with a wavelength of 600-800 nm. Grubbs et al teach a method of evaluating coffee bean color comprising the use of a helium-neon gas laser with a wavelength of 632.8nm (column 7, lines 41-46). It would have been obvious to one of ordinary skill in the art to incorporate the laser of Grubbs et al into the invention of Camerini Porzi since both are directed to the color evaluation of coffee beans by use of light beams and since Grubbs et al teach that the laser light source has only a single wavelength and therefor is simpler to calibrate (column 8, lines 30-36).

14. Claims 75-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi as applied to claim 71 above, in view of Gell Jr [Pat. No. 4,494,314].

Camerini Porzi teach the above mentioned concepts. Camerini Porzi do not teach a multiplicity of different product types. Gell Jr teaches a coffee roaster with settings for multiple types of beans and roasting levels (column 4, line 61 to column 5, line 19). It would have been obvious to one of ordinary skill in the art to incorporate the multiple setting and roasting levels of Gell Jr into the invention of Camerini Porzi since Gell Jr teaches that coffee beans come in different sizes and densities which can effect the roasting time (column 5, line 10) and since Camerini Porzi is primarily directed to

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controlling the roasting time of coffee beans by monitoring their color (column 1, lines 8-16).

15. Claims 62-64 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi in view of Brookman et al [Pat. No. 3,522,692].

Camerini Porzi teaches the above mentioned concepts. Camerini Porzi does not teach removing pollutants from the roasting gas, cooling the filtered gas, and exhausting the cool, filtered gas. Brookman et al teach a method of roasting coffee beans comprising feeding roasting air from a roaster to a filtration system (Figure 1, #1, 3, 5), cooling the filtered gas (column 3, lines 21 and 75), and exhausting the cool, filtered gas (Figure 1, 13). It would have been obvious to one of ordinary skill in the art to incorporate the gas cleaning method of Brookman et al into the invention of Camerini Porzi since both are directed to coffee roasting, since the method Camerini Porzi would require an exhaust system of some type, and since the method of Brookman et al is effective at removing odors and other undesirable contaminants in the gas which can be harmful (column 1, lines 20-45). It would have been obvious to one of ordinary skill in the art to place the coffee roaster of Camerini Porzi inside a building, such as a supermarket, since roasters were commonly placed in stores and buildings, as evidenced by Hansen (column 1, lines 49-62), and since this would allow consumers to roast coffee beans to whatever degree they desired.

16. Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0040823 in view of Brookman et al.



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EP 0040823 teach a method for controlling a coffee roaster comprising roasting a sample of coffee beans to provide a degree of doneness (Figure 1, P'), a color measuring devices which respond to the color of roasting coffee beans and sample (Figure 1, A & F), a comparison circuit (Figure 1, 14), and ending roasting when the two signals correspond (paragraphs 2-3). EP 0040823 do not teach filtering, cooling, and discharging the roasting gas. Brookman et al teach a method of roasting coffee beans comprising feeding roasting air from a roaster to a filtration system (Figure 1, #1, 3, 5), cooling the filtered gas (column 3, lines 21 and 75), and exhausting the cool, filtered gas (Figure 1, 13). It would have been obvious to one of ordinary skill in the art to incorporate the gas cleaning method of Brookman et al into the invention of EP 0040823 since both are directed to coffee roasting, since the method of EP 0040823 would require an exhaust system of some type, and since the method of Brookman et al is effective at removing odors and other undesirable contaminants in the gas which can be harmful (column 1, lines 20-45). It would have been obvious to one of ordinary skill in the art to place the coffee roaster of EP 0040823 inside a building, such as a supermarket, since roasters were commonly placed in stores and buildings, as evidenced by Hansen (column 1, lines 49-62), and since this would allow consumers to roast coffee beans to whatever degree they desired. Although not specifically recited, it would have been obvious to one of ordinary skill in the art that the desired color or darkness level of EP 0040823 would inherently possess a desired aroma since both are properties of fully roasted coffee beans.

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17. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi and Tidland et al as applied to claim 1 above, in view of Grubbs et al. Camerini Porzi, Tidland et al, and Grubbs et al teach the above mentioned concepts. Camerini Porzi, Tidland et al, and Grubbs et al are combined for the above mentioned reasons and since they are all directed to methods of roasting.

18. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi and Tidland et al as applied to claim 1 above, in view of Gell Jr. Camerini Porzi, Tidland et al, and Gell Jr teach the above mentioned concepts. Camerini Porzi, Tidland et al, and Gell Jr are combined for the above mentioned reasons and since they are all directed to methods of roasting.

19. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi and Tidland et al as applied above, in view of Hansen.

Camerini Porzi and Tidland et al teach the above mentioned concepts. Camerini Porzi and Tidland et al do not teach cooling the filtered gas. Hansen teaches a method of roasting foods by cooling the roasting air (column 5, lines 35-38), cleaning the roasting air (column 4, lines 29-42), followed by exhausting the cool, clean air to a room (column 4, lines 43-57). It would have been obvious to one of ordinary skill in the art to incorporate the cooling of Hansen into the invention of Camerini Porzi since both are directed to the roasting of coffee beans, since Hansen teaches that this prevents emission of heat, smoke, and odors to the surrounding air which is an inconvenience to the customers and work staff (column 1, lines 49-62), and since the roasting method of Camerini Porzi would naturally require some means of exhaust.

20. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi in view of Tidland et al, Hansen, Grubbs et al, and Scher et al [Pat. No. 5,062,066].

Camerini Porzi, Tidland et al, Grubbs et al, and Hansen teach the above mentioned concepts. Camerini Porzi, Tidland et al, Grubbs et al, and Hansen do not teach controlling multiple roasting machines at different locations. Scher et al teach a control system for roasting comprising multiple roasters (column 3, line 15) and monitoring the color of the product (column 5, line 16). It would have been obvious to one of ordinary skill in the art to control multiple roasters as taught by Scher et al with the invention of Camerini Porzi since both are directed to methods of roasting, since the multiple roasters of Scher et al would create more diversified products and reduce the waiting time; and since Camerini Porzi teaches a remote processing unit which is located a distance away from the roaster (column 3, line 63). It would have been obvious to one of ordinary skill in the art to combine the teachings of Camerini Porzi, Tidland et al, Grubbs et al, Hansen, and Scher et al since they are all directed to methods of roasting food products.

21. Claims 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi, Tidland et al, Grubbs et al, Scher et al, and Hansen as applied to claim 56 above, in view of Helbling [Pat. No. 5,158,793].

Camerini Porzi, Tidland et al, Grubbs et al, Hansen, and Scher et al teach the above mentioned concepts. Camerini Porzi, Grubbs et al, Hansen, and Scher et al do not

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teach a step of keeping an inventory and generating a low inventory signal. Helbling teaches a method of making coffee including a weight sensor which detects when a station is empty and generates an "empty" signal (column 7, line 54). It would have been obvious to one of ordinary skill in the art to incorporate the weight control system of Helbling into the invention of Camerini Porzi since both are directed to methods of coffee production and since this would be an effective means of maintaining a constant rate of roasting in Camerini Porzi by eliminating any stoppages in the process due to an empty supply bin. It would have been obvious to one of ordinary skill in the art to combine the teachings of Camerini Porzi, Tidland et al, Grubbs et al, Scher et al, Hansen, and Helbling since they are all directed to methods of roasting food products.

22. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi, Tidland et al, Grubbs et al, Scher et al, and Hansen as applied to claim 56 above, in view of Gell Jr.

Camerini Porzi, Tidland et al, Grubbs et al, Scher et al, Hansen, and Gell Jr teach the above mentioned concepts. Camerini Porzi, Tidland et al, Grubbs et al, Scher et al, Hansen, and Gell Jr are combined for the above mentioned reasons and also since they are all directed to methods of roasting food products.

23. Claims 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi and Brookman et al as applied to claim 62 above, in view of Grubbs et al.

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Camerini Porzi, Brookman et al, and Grubbs et al teach the above mentioned concepts and are combined for the above mentioned reasons and also since they are all directed to methods of roasting coffee beans.

24. Claims 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camerini Porzi and Brookman et al as applied to claim 62 above, in view of Gell Jr. Camerini Porzi, Brookman et al, and Gell Jr teach the above mentioned concepts. Camerini Porzi, Hansen, and Gell Jr are combined for the above mentioned reasons and since they are all directed to methods of roasting.

### ***Response to Arguments***

25. Applicant's arguments with respect to claims 1-9, 11, 56-58, 62-69, and 71-81 have been considered but are moot in view of the new ground(s) of rejection.

With regards to applicant's arguments against Tidland et al, applicant's attention is drawn to column 5, lines 42-53 of Tidland et al, under the heading of "Roasting Stages" which disclose that **during roasting**, some of the excess air in the roasting system escapes through the filters to the outside environment and the remainder of the heated air is drawn into the air reconditioning system where it is recycled back into the roasting chamber. Tidland et al further recite "green beans fed into the infeed hopper 42, fall into the roasting chamber 36. A start button 71 is depressed on control panel 68 initiating the roasting process" (column 5, lines 22-25),

With regards to applicants' arguments against Camerini Porzi: Camerini Porzi teaches comparing a first parameter (a properly roasted bean color) with a second

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parameter (the beans being roasted) "continuously as the roast progresses" and terminating roasting when they match (column 4, lines 17-26). Also, Camerini Porzi teaches the output of the colorimeter can be set to reflect either a prescribed roast characteristic of the end product, or the amount of heat to be applied during the roasting step (column 2, lines 42-47). Also, the photoemitter element, photodetector, and colorimeter (Figure 1, #1, 2, 7) are all "spaced from the window" with an "air gap" (Figure 1, 4).

In response to applicant's argument that Hansen is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Hansen and Camerini Porzi are directed to methods of roasting foods with heated air. Furthermore, it was well known to filter and cool roasting gas from coffee beans as evidenced by Brookman et al, JP 02000189326A, and JP 401098469A.

### ***Conclusion***

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew E Becker whose telephone number is 703-305-0300. The examiner can normally be reached on Monday-Thursday 7am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 703-308-3959. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3602 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1495.

Drew Becker  
April 19, 2001

  
KEITH HENDRICKS  
PRIMARY EXAMINER